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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,566	03/27/2007	Benjamin B. Yellen	46528-5091-00-US (428101)	6514
10872	7590	12/30/2010	EXAMINER	
Riverside Law LLP 300 Four Falls Corporate Center, Suite 710 300 Conshohocken State Road West Conshohocken, PA 19428			JANCA, ANDREW JOSEPH	
			ART UNIT	PAPER NUMBER
			1774	
			NOTIFICATION DATE	DELIVERY MODE
			12/30/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

dockets@riversidelaw.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/586,566	<b>Applicant(s)</b> YELLEN ET AL.	
	<b>Examiner</b> Andrew Janca	<b>Art Unit</b> 1774	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 15-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/19/10.
2. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 6-9, and 13-14 are rejected under 35 USC 102(b) as anticipated by US 6,231,760 B1 to Siddiqi.
5. With regard to claim 1, Siddiqi discloses a device for manipulating non-magnetic particles dispersed inside a fluid comprising: a) a fluid holding chamber, one of (84, 103) comprising an inner and outer surface; b) a fluid in contact with the inner surface of the

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fluid holding chamber, said fluid containing a dispersion of magnetic particles (10:64-11:12) and a dispersion of non-magnetic particles (10:42-63); and c) at least two sources of magnetic fields, two or more of (82A..82F, 101A..101Q) positioned in close proximity to, or inside of, the fluid holding chamber which produce a changeable pattern of magnetic field minima and maxima regions thereby causing the non-magnetic particles in the fluid to be transported towards the magnetic field minima regions by magnetic force (figures 8, 10b; 7:61-8:14, 18:46-61).

6. With regard to claim 2, Siddiqi discloses the device of claim 1 further comprising an array of different molecules, the different molecules of the plastic comprising the tube (6:54-56), attached to the inner surface of the fluid holding chamber.

7. With regard to claim 3, Siddiqi discloses the device of claim 1 further comprising an array of different nanoparticles or microparticles attached to the inner surface of the fluid holding chamber (9:34-37, 11:7-9).

8. With regard to claim 6, Siddiqi discloses the device of claim 1 wherein the magnetic particles dispersed in the fluid comprise magnetic nanoparticles, paramagnetic ions, or molecular magnets (11:7-9).

9. With regard to claim 7, Siddiqi discloses the device of claim 6 wherein the magnetic nanoparticles comprise iron, iron-oxide, iron-platinum, cobalt, nickel, a rare-earth metal or another alloy forming ferromagnetic, or a ferrimagnetic or superparamagnetic material, or any combination thereof (11:1-2).

10. With regard to claim 8, Siddiqi discloses the device of claim 6 wherein the magnetic nanoparticles have a surface covered by molecules which provide steric or

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ionic hinderance in order to prevent irreversible aggregation of the magnetic nanoparticles in the fluid (11:15-22).

11. With regard to claim 9, Siddiqi discloses the device of claim 1 wherein the magnetic sources comprise an array of magnetizable features, either one of array (82A..82F, 101A..101Q) (figures 8, 10b).

12. The additional elements of claim 13 are limitations of intended use. An additional time-varying source of substantially uniform magnetic field, which would necessarily affect the patterns of the magnetizable field sources, may be applied to the apparatus if desired. It has been held that the manner of operating an apparatus does not differentiate an apparatus claim from the prior art, if the prior art apparatus teaches all of the structural limitations of the claim. See *Ex Parte Masham*, 2 USPQ2d 1647 (BPAI 1987).

13. With regard to claim 14, Siddiqi discloses the device of claim 1 wherein the sources of magnetic fields comprise an array of conductors 101A..101Q and a means for switching or varying electrical current in said conductors (figure 10b; 19:28-20:9).

14. Claims 1-2, 4-5, and 9-14 are rejected under 35 USC 102(b) as anticipated by US 6,085,599 to Feller.

15. With regard to claim 1, Feller discloses a device for manipulating non-magnetic particles dispersed inside a fluid comprising: a) a fluid holding chamber, one of (2610, the pipe of (38:34)) comprising an inner and outer surface; b) a dispersion of magnetic particles, some or all of 2604, which may be introduced in a fluid also containing a dispersion of non-magnetic particles, in contact with the inner surface of the fluid

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holding chamber; and c) at least two sources of magnetic fields, any two or more of (2603, 2603, 2604, 2620, 2611, 2611) positioned in close proximity to, or inside of, the fluid holding chamber which produce a changeable pattern of magnetic field minima and maxima regions thereby causing the non-magnetic regions in the fluid with any non-magnetic particles they may contain to be transported towards the magnetic field minima regions by relative displacement by the magnetic particles due to magnetic force (figure 53; 37:51-39:18). The fluid containing non-magnetic particles comprises the material worked upon by the fluid holding chamber, magnetic field sources, and magnetic particles which comprise the apparatus structure recited by claim 1. It has been held that “[e]xpressions relating the apparatus to contents thereof during an intended operation are of no significance in determining the patentability of the apparatus claim.” See *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969). As Feller discloses that the device may act upon ocean water (28:38-46), which contains many different kinds of non-magnetic as well as magnetic particles, the device of Feller is capable of performing the functions recited by claim 1. It has been held that if the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967); and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

16. With regard to claim 2, Feller discloses the device of claim 1 further comprising an array of different molecules, the molecules comprising the magnetic particles 2604 and the different materials comprising the chamber walls and the electrodes 2611, attached to the inner surface of the fluid holding chamber (figure 53).

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17. With regard to claim 4, Feller discloses the device of claim 1 further comprising a sensor 2611 attached to the inner surface of the fluid holding chamber (figure 53; 5:60-6:11, 37:63).

18. With regard to claim 5, Feller discloses the device of claim 4 wherein the sensor 2611 is selected from the group consisting of optical, electrical, electrochemical, and magnetic sensors (figure 53; 5:60-6:11, 37:63).

19. With regard to claim 9, Feller discloses the device of claim 1 wherein the magnetic sources comprise an array of magnetizable features, one or more of (2611, 2620-2604) (38:34-35; figure 53).

20. With regard to claim 10, Feller discloses the device of claim 9 wherein the magnetizable features 2611 are patterned on top of the inner surface of the fluid holding chamber: being flatly recessed in and on the top end of an inner surface of the fluid holding chamber 2610 and arranged in a pattern, features 2611 are patterned thereon (figure 53).

21. With regard to claim 11, Feller discloses the device of claim 9 wherein the magnetizable features 2611 are embedded inside of the inner surface of the fluid holding chamber 2610 (figure 53).

22. With regard to claim 12, Feller discloses the device of claim 9 wherein the magnetizable features 2620-2604 are attached to mobile supports which can be submerged in the fluid (38:27-40).

23. With regard to claim 13, Feller discloses the device of claim 1 wherein the patterns of the magnetizable field sources 2603-2620 may be changed by applying an

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additional time-varying source of substantially uniform magnetic field, one of (another one of 2603, a current applied to 2611) (figure 53; 37:61-62, 38:10-14).

24. With regard to claim 14, Feller discloses the device of claim 1 wherein the sources of magnetic fields comprise an array of conductors 2611 and a means for switching or varying electrical current in said conductors (figure 53).

### ***Conclusion***

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Janca whose telephone number is (571) 270-5550. The examiner can normally be reached on M-Th 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJJ

/DAVID L. SORKIN/  
Primary Examiner, Art Unit 1774